IN THE CLAIMS

Please amend the claims as follows:

1. – 12. (canceled)

13. (currently amended) A voltage generator in which an electrical insulating material ~~as claimed in claim 1~~ is implemented for electrical insulation, said electrical insulating material comprising:

a first material; and

a second material distributed within the first material to thereby increase electrical conductivity for, by dissipation of charge, preventing voltage flashover, said insulating material having a specific resistance greater than 10^{10} Ωcm and less than 10^{12} Ωcm.

14. (currently amended) ~~The method of claim 20, further comprising:~~ A method for providing hybrid electrical insulating material to prevent voltage flashover comprising:

combining ones of formed composite electrical insulating materials to~~creating a~~ create said hybrid electrical insulating material ~~by executing said forming for respective constituents of said hybrid insulating material~~, the forming of a composite electrical insulating material comprising distributing within a first material a second material to thereby increase electrical conductivity for, by dissipation of charge, preventing said voltage flashover, said composite electrical insulating material having a specific resistance greater than 10^{10} Ωcm and less than 10^{12} Ωcm.

15. (previously presented) An X-ray system having a voltage generator as claimed in claim 13.

16. – 22. (canceled)

23. (previously presented) An electrical insulating material for a voltage generator, said generator for receiving an input voltage, increasing the received voltage, and making available, as output, the increased voltage, said insulating material comprising:

a first material; and

a second material distributed within said first material to thereby increase electrical conductivity for, by dissipating charge, preventing voltage flashover during operation of said generator, said insulating material being shaped for implementation within an interior of said generator to provide electrical insulation between components of said generator.

24. (currently amended) An electrical insulating material as claimed in claim 23, said generator being operable at a continuous power of 15 kW with mixed loading that includes a direct current voltage~~distribution of said second material within said first material being uniform, said second material being electrically conductive and coating spherical particles~~.

25. – 27. (canceled)

28. (new) An electrical insulating material comprising:

a first material; and

a second material comprising at least one of a metal and an electrically conductive mineral, said second material coating a further material comprising particles, and being distributed within said first material to thereby increase electrical conductivity for, by dissipation of charge, preventing voltage flashover, said insulating material having a specific resistance greater than 10^{10} Ωcm and less than 10^{12} Ωcm.

29. (new) The electrical insulating material of claim 28, said at least one being a metal.

30. (new) The electrical insulating material of claim 28, said first material having a dielectric constant greater than 3 and less than 4.

31. (new) The electrical insulating material of claim 28, wherein said insulating material hardens into a hard foam-like material.

32. (new) The electrical insulating material of claim 28, further comprising a wetting and dispersing additive to control at least one of thixotropy and viscosity of said first material.

33. (new) The method of claim 28, wherein said particles have an additional coating comprising a material that improves adhesion between said particles and said first material.

34. (new) The method of claim 28, wherein said particles are embedded in said first material to which there is added an adhesion promoter for improving adhesion between said particles and said first material.

35. (new) An electrical insulating material comprising:

a polymer having a dielectric constant greater than 3 and less than 4; and

a second material comprising at least one of a metal and an electrically conductive mineral, said second material coating a further material comprising particles, and being distributed within said polymer to thereby increase electrical conductivity for, by dissipation of charge, preventing voltage flashover, said electrical insulating material being a hard, foam-like material.

36. (new) A method for making an electrical insulating material comprising:

distributing within a first material a second material so as to thereby increase electrical conductivity for, by dissipation of charge, preventing voltage flashover, said second material coating particles;

introducing, into said particles, gas to set internal gas pressure according to particle size so as to avoid intra-particle partial discharges; and

selecting, among other parameters, said pressure to achieve a targeted dielectric strength of said electrical insulating material.

37. (new) A hybrid electrical insulating material for implementation within an interior of an electrical device, said hybrid electrical insulating material comprising:

a solid electrical insulating material; and

a liquid electrical insulating material,

each of said solid and said liquid electrical insulating material comprising:

a respective first electrical insulating material; and

a respective further material,

said respective further material being added to the respective first material so as to change at least one of electrical conductivity and a dielectric constant and to prevent voltage drops that occur during operation of said electrical device from reaching correspondingly flashover, or breakdown, voltage of said hybrid electrical insulating material.

38. (new) The hybrid electrical insulating material of claim 37, the adding lowering specific resistance for at least one of said solid and liquid electrical insulating material to thereby prevent voltage flashover.

39. (new) The hybrid electrical insulating material of claim 38, said adding lowering both specific resistances to thereby prevent voltage flashover.

40. (new) The hybrid electrical insulating material of claim 39, said lowered specific resistance of said solid electrical insulating material being greater than 10^{10} Ωcm and less than 10^{12} Ωcm, said lowered specific resistance of said liquid electrical insulating material being greater than 10^{10} Ωcm and less than 10^{13} Ωcm.

41. (new) The voltage generator of claim 13, the implementing for the preventing being so as to prevent voltage flashover on account of surface charges on individual power components of said voltage generator that are mutually separated by said electrical insulating material.

42. (new) The method of claim 14, wherein just one of said ones is a solid.